



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

NC

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/010,919 01/23/98 ORDISH

C 3432.73540

EXAMINER

LM01/0406

BANNER & WITCOFF LTD
1001 G STREET NW
WASHINGTON DC 20001-4597

MORGAN, G

ART UNIT

PAPER NUMBER

2761

DATE MAILED:

5
04/06/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/010,919

Applicant(s)
Ordish et al.

Examiner
George Morgan

Group Art Unit
2761



☒ Responsive to communication(s) filed on Jan 23, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 43-66 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 43-66 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2761

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

Claim Objections

3. Claims 43, 47, 48, 50, 53-64, and 66 are objected to because of the following informalities:

In order to avoid confusion, consistent spelling in the claims for the same words should be maintained. In particular, the applicant is advised to be consistent with regard the spelling of the word "acknowledgment". The alternative spelling "acknowledgmnt" is used in several places. Applicant should choose one way to spell this word.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the

Art Unit: 2761

contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 43-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner, U.S. Patent No. 4,903,201, in view of Benton et al., U.S. Patent No. 4,926,325.

As per Claim 43, *Wagner* discloses a system for exchanging signals relating to at least a bid and an offer, the system comprising:

a network connected to workstations [Figure 1; col. 3, line 64 to col. 7, line 1];

a first workstation of the workstations, the first workstation sending a first signal to the network signaling a bid or an offer in response to an initial offer or initial bid [Figure 1, ref. no. 18 (first workstation); col. 3, lines 12-14; col. 20, lines 3-7 (initial bid price or offer price is received at the terminal); col. 20, lines 15-30 (limit order sent to the trading system)]; and

a second workstation of the workstations, the second workstation receiving a second signal indicative of the bid or the offer from the network [Figure 1, ref. no. 20 (second

Art Unit: 2761

workstation); col. 7, lines 32-35; “[The trading system] also reports all bids and offers as they are received....”].

Wagner discloses that a workstation receives an acknowledgment of a bid or offer [col. 20, lines 36-41; “If an invalid identification number is transmitted, the computer returns a not accepted message because of invalid identification. If the identification number is accepted, and if the buy or sell transaction can be completed, the trading system notifies the remote personal terminal on the display”]. *Wagner* does disclose that the second workstation sends an acknowledgment of the received bid or offer to the network; and the network sends at least a third signal to the first workstation and at least a fourth signal to the second workstation, the at least third and the at least fourth signals indicating acknowledgment of the acknowledgment from the second workstation.

Benton et al. teach a system for performing financial transactions between a host and remote terminals that involves sending an acknowledgment and then sending “an acknowledgment of the acknowledgment” [Figure 9-5(a)-(b); col. 13, lines 45-56. A smart card acknowledges that a “Request to Store Transaction” signal has been received by sending an acknowledgment. If the acknowledgment is received, then the message “Transaction Completed” is sent back to each terminal. This message is an “acknowledgment of the acknowledgment”].

Benton et al. teach that each important transmission should be followed by an acknowledgment signal. And even without the benefit of the teachings of *Benton et al.*, when a

Art Unit: 2761

human intermediary handles transactions between two parties, the obvious solution would be to simply ask both parties whether they have received the message. If both reply back, then the intermediary would notify the parties of a successful message exchange. If the parties did not receive such a final confirmation signal, they would reasonably assume that there was some problem with the message transfer. So much would appear to follow from common sense from ordinary non-automated business dealings. It would have been obvious to one of ordinary skill in the art to combine such ordinary business practices and/or the teachings of *Benton et al.* with the system of *Wagner*. The motivation would have been to provide a reliable system for exchanging important messages.

As per Claim 44, *Wagner* does not disclose that the at least third signal includes a first purchase confirmation signal and the at least fourth signal includes a second purchase confirmation signal. *Benton et al.* teach that the at least third signal includes a first purchase confirmation signal and the at least fourth signal includes a second purchase confirmation signal [*Id.*]. It would have been obvious to one of ordinary skill in the art to combine this feature of *Benton et al.* with *Wagner*. The motivation would have been to provide a reliable system for exchanging important messages.

As per Claim 45, *Wagner* discloses at least one storage node for recording the completion of a purchase relating to the bid or offer [Figure 5; col. 10, lines 58-64 (noting that information relating to executed trades are stored, and then printed)].

Art Unit: 2761

As per Claim 46, *Wagner* discloses that prior to the transmission of the first signal by the processor of the first workstation, the processor of the second workstation transmits the initial offer or initial bid to the network [col. 3, lines 12-14; col. 20, lines 3-7].

As per Claim 47, *Wagner* discloses that the network generates and transmits an acknowledgment of the receipt of the initial bid or offer to the second workstation [col. 20, lines 36-41; “If an invalid identification number is transmitted, the computer returns a not accepted message because of invalid identification. If the identification number is accepted, and if the buy or sell transaction can be completed, the trading system notifies the remote personal terminal on the display”]. Furthermore, after a trader sends an initial bid or offer to the central computer system, this information is then displayed to *all* traders. “Thus, each bid or offer will become part of the market data displayed in every member’s remote terminal video monitor”[col. 3, lines 43-50]. This would serve as an acknowledgment to the trader who placed the bid or offer. Naturally, the trader would glance at the video screen to see whether his bid or offer was recorded properly].

As per Claim 48, *Wagner* discloses that the network generates and transmits an acknowledgment of the receipt of the first signal. [See discussion under claim 47 above].

As per Claim 49, *Wagner* discloses that the acknowledgment of the receipt of the first signal and the second signal indicative of the bid or offer are match notification signals generated by at least one computer in the network [col. 4, lines 3-22. Noting that the computer system matches bids and offers, and executes the transactions. “Each transaction execution will be

Art Unit: 2761

immediately confirmed to the members on both sides of the trade by the printing mechanisms of those members terminals”].

As per Claim 50, *Wagner* does not expressly disclose that the second workstation further comprises: a confirmation timer for measuring the time elapsed from the second workstation receiving the second signal until the second workstation receives the fourth signal; and a storage unit for storing an indication that a purchase relating to the bid or offer was not completed upon the elapsed time measured by the confirmation timer exceeding a predetermined confirmation timeout period. *Benton et al.* teach a confirmation timer for measuring the time elapsed from a workstation receiving a signal, and for generating (and thus, inherently, storing) a “timeout” message upon the elapsed time measured by the confirmation timer exceeding a predetermined confirmation timeout period [col. 20, lines 30-35]. And even without the benefit of the teachings of *Benton et al.*, use of timeout algorithms were also notoriously well known in the computer arts. (E.g., in the IDMS database management system, the user receives an error code indicative of a timeout if there is no response from the system within a predetermined time period. This would usually cause a abnormal termination to the application program, with a rollback of any transactions that were being executed). It would have been obvious to one of ordinary skill in the art to apply such ordinary and well-known techniques, and/or the teachings of *Benton et al.*, to the system of *Wagner*. The motivation would have been to provide a reliable system for exchanging important messages.

Art Unit: 2761

As per Claim 51, *Wagner* does not expressly disclose that the second workstation further comprises a display for displaying that a late confirmation was received upon the second workstation receiving the fourth signal after the predetermined confirmation timeout period has expired for the purchase. *Benton et al.* teach a display for displaying that a late confirmation was received after the predetermined confirmation timeout period has expired [col. 20, lines 30-35; "an appropriate error message is both displayed and printed"]. It would have been obvious to one of ordinary skill in the art to combine *Benton et al.*'s display with the system of *Wagner*. The motivation would have been to provide a means of notifying market participant's that there is technical problem with communication among members, and also so that corrective action can be taken.

As per Claim 52, *Wagner* discloses that the network further comprises a computer for matching bids and offers from the workstations in accordance with predetermined matching criteria [col. 4, lines 3-22. Noting that the computer system matches bids and offers, and executes the transactions].

As per Claim 53, *Wagner* does not disclose an acknowledgment timer for measuring the time elapsed from reception of the first signal by the network from the first workstation until reception of the acknowledgment by the network from the second workstation. *Benton et al.* teach an acknowledgment timer for measuring the time elapsed from reception of a signal until reception of the acknowledgment signal [col. 20. lines 30-35. The dial tone is construed as a acknowledgment signal. After a predetermined time, if no dial tone is received, an error

Art Unit: 2761

condition is raised]. *Benton et al.*'s acknowledgment timer is used in order to ensure reliable communication between the sender and receiver of information. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the acknowledgment timer of *Benton et al.* into *Wagner*. The motivation would have been to ensure reliable communication between the sender and receiver of information. *Wagner* also does not disclose a storage unit for storing an indication that a purchase was not acknowledged upon the elapsed time measured by the acknowledgment timer exceeding a predetermined acknowledgment timeout period. *Wagner* teaches a storage unit for storing an indication that a purchase was made, and "a record will exist of the precise time [an order] was entered, the precise time it was executed and the price time an execution report was transmitted [col. 4, lines 17-22]". Thus, *Wagner* stores information regarding the timing and execution of trades. If *Benton et al.* and *Wagner* were in combination, it would have been obvious to also indicate in the storage unit information regarding those trades that timed out. The motivation would have been to ensure that an accurate record of trading is kept.

As per Claim 54, *Wagner* discloses a method for acknowledging the receipt signals relating to bids and offers in an electronic trading system, the electronic trading system including a network and at least first and second workstations coupled to a network, the method comprising the steps of: sending an offer or bid from the first workstation to the network in response to an initial bid or offer [Figure 1, ref. No. 18 (first workstation); col. 3, lines 12-14; col. 20, lines 3-7

Art Unit: 2761

(initial bid price or offer price is received at the terminal); col. 20, lines 15-30 (limit order sent to the trading system)]; and

receiving the offer or bid from the network at the second workstation [Figure 1, ref. No. 20 (second workstation); col. 7, lines 32-35; “[The trading system] also reports all bids and offers as they are received....”];

Wagner does not disclose sending from the second workstation to the network an acknowledgment of the receipt of the offer or bid; and sending from the network to the first and second workstation an indication that the network acknowledges the acknowledgment from the second workstation.

Benton et al. teach a system for performing financial transactions between a host and remote terminals that involves sending an acknowledgment and then sending “an acknowledgment of the acknowledgment” [Figure 9-5(a)-(b); col. 13, lines 45-56. A smart card acknowledges that a “Request to Store Transaction” signal has been received by sending an acknowledgment. If the acknowledgment is received, then the message “Transaction Completed” is sent back to each terminal. This message is an “acknowledgment of the acknowledgment”].

Benton et al. teach that each important transmission should be followed by an acknowledgment signal. And even without the benefit of the teachings of *Benton et al.*, when a human intermediary handles transactions between two parties, the obvious solution would be to simply ask both parties whether they have received the message. If both reply back, then the

Art Unit: 2761

intermediary would notify the parties of a successful message exchange. If the parties did not receive such a final confirmation signal, they would reasonably assume that there was some problem with the message transfer. So much would appear to follow from common sense from ordinary non-automated business dealings. It would have been obvious to one of ordinary skill in the art to combine such ordinary business practices and/or the teachings of *Benton et al.* with the system of *Wagner*. The motivation would have been to provide a reliable system for exchanging important messages.

As per Claim 55, *Wagner* discloses the steps of: sending an initial bid or offer from the second workstation to the network; and receiving an acknowledgment of the initial bid or offer from the network at the second workstation [col. 20, lines 3-53; "If an invalid identification number is transmitted, the computer returns a not accepted message because of invalid identification. If the identification number is accepted, and if the buy or sell transaction can be completed, the trading system notifies the remote personal terminal on the display"].

As per Claim 56, *Wagner* does not disclose the steps of: measuring an elapsed confirmation time from receiving the offer or bid from the network at the second workstation until the second workstation receives from the network the indication that the network received the acknowledgment of the transaction from the second workstation; and storing an indication that the transaction is unconfirmed upon the measured elapsed confirmation time exceeding a predetermined confirmation timeout period. As was discussed under the analysis of Claim 43, *Benton et al.* teach the use of a timing signal (which was also notoriously well known in the

Art Unit: 2761

database arts, as mentioned above). It would have been obvious to one of ordinary skill in the art to apply these teachings in the manner claimed. The motivation would have been to provide a reliable system for exchanging important messages.

As per Claim 57, *Wagner* does not expressly disclose the step of displaying at the second workstation that a late confirmation was received, after the predetermined confirmation timeout period has expired, at the second workstation the indication that the network received the acknowledgment of the receipt of the bid or offer sent from the second workstation. As was already pointed out, *Benton et al.* teach a display for displaying that a late confirmation was received after the predetermined confirmation timeout period has expired [col. 20, lines 30-35; “an appropriate error message is both displayed and printed”]. It would have been obvious to one of ordinary skill in the art to combine *Benton et al.*’s display with the system of *Wagner*. The motivation would have been to provide a means of notifying market participant’s that there is technical problem with communication among members, and also so that corrective action can be taken.

As per Claim 58, *Wagner* does not disclose the steps of measuring an elapsed acknowledgment timer from receiving the offer or bid at the network from the first workstation until the network receives the acknowledgment from the second workstation; and storing an indication that the bid or offer transmitted to the second workstation is unacknowledged upon the measured elapsed acknowledgment time exceeding a predetermined acknowledgment timeout period. As was discussed under the analysis of Claim 43, the use of an acknowledgment timer

Art Unit: 2761

for the purpose of ensuring communications reliability was taught by *Benton et al.* It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the acknowledgment timer of *Benton et al.* into *Wagner*. The motivation would have been to ensure reliable communication between the sender and the receiver of information.

As per Claim 59, *Wagner* disclose a computer-readable medium having computer-executable instructions for performing steps comprising:

receiving at networked processor an offer or bid from a first workstation in response to an initial bid or offer [Figure 1, ref. No. 20 (second workstation); col. 7, lines 32-35];

sending the offer or bid from the networked processor to a second workstation [col. 20, lines 15-30]; and

receiving an acknowledgment of a transaction based on the offer or bid from the second workstation at the networked processor [col. 20, lines 36-41].

Wagner does not disclose sending from the networked processor to the first and second workstations an indication that the networked processor received the acknowledgment of the transaction. As was pointed out under the analysis of Claim 43, *Benton et al.* teach a system for performing financial transactions between a host and remote terminals that involves sending an acknowledgment and then sending "an acknowledgment of the acknowledgment". Further, it was pointed out that even without the benefit of the teachings of *Benton et al.*, when a human intermediary handles transactions between two parties, the obvious solution would be to simply ask both parties whether they have received the message. It would have been obvious to one of

Art Unit: 2761

ordinary skill in the art to combine such ordinary business practices and/or the teachings of *Benton et al.* with the system of *Wagner*. The motivation would have been to provide a reliable system for exchanging important messages.

As per Claim 60, *Wagner* discloses further instructions for performing the following steps:

receiving at the networked processor the initial bid or offer from the second workstation [Figure 1, ref. No. 20 (second workstation); col. 7, lines 32-35; “[The trading system] also reports all bids and offers as they are received....”]; and

sending an acknowledgment of the initial bid or offer from the networked processor to the second workstation [col. 20, lines 3-53].

Claim 61, recites the same limitations as Claim 50, and is rejected for the same reasons.

As per Claim 62, *Wagner* discloses a workstation participating in the exchange of signals, the signals including at least a bid or an offer, the workstation connected to a network, the network connected to at least a second workstation [Figure 1], the workstation comprising:

a receiver for receiving an initial offer or an initial bid [Figure 1, ref. No. 18 (first workstation); col. 3, lines 12-14; col. 20, lines 3-7 (initial bid price or offer price is received at the terminal)];

a processor for processing the initial bid or offer [Figure 1]; and

Art Unit: 2761

an output for outputting a first signal to the network, the first signal signaling a bid or an offer in response to the initial offer or initial bid [col. 20, lines 3-7 (initial bid price or offer price is received at the terminal)]:

Wagner discloses that a workstation receives an acknowledgment of a bid or offer [col. 20, lines 36-41]. *Wagner* does not expressly disclose the receiver also receiving a second signal wherein the second signal indicates the acknowledgment of a receipt of the first signal by the second workstation. As was discussed under the analysis of Claim 43, *Benton et al.* teach a system for performing financial transactions between a host and remote terminals that involves sending an acknowledgment and then sending “an acknowledgment of the acknowledgment”. Further, it was pointed out that even without the benefit of the teachings of *Benton et al.*, when a human intermediary handles transactions between two parties, the obvious solution would be to simply ask both parties whether they have received the message. It would have been obvious to one of ordinary skill in the art to combine such ordinary business practices and/or the teachings of *Benton et al.* with the system of *Wagner*. The motivation would have been to provide a reliable system for exchanging important messages.

Claim 63, recites the same limitations as Claim 43, and is rejected for the same reasons.

As per Claim 64, *Wagner* discloses the step of processing the acknowledgment as an acceptance of the transmitted offer or bid [col. 20, lines 15-53; after the trader enters his bid or offer, the acknowledgment of acceptance of the transaction by the exchange would be recorded on a video monitor which is in a fixed location near the trader’s station].

Art Unit: 2761

As per Claim 65, *Wagner* does not disclose that the third signal and the fourth signal indicate that a transaction relating to the bid or offer is complete. As was pointed out under the analysis of Claim 43, *Benton et al.* teach a system for performing financial transactions between a host and remote terminals that involves sending an acknowledgment and then sending “an acknowledgment of the acknowledgment”. Once the “acknowledgment of the acknowledgment” has been received, the transaction is considered “complete”. Further, it was pointed out that even without the benefit of the teachings of *Benton et al.*, when a human intermediary handles transactions between two parties, the obvious solution would be to simply ask both parties whether they have received the message. It would have been obvious to one of ordinary skill in the art to combine such ordinary business practices and/or the teachings of *Benton et al.* with the system of *Wagner*. The motivation would have been to provide a reliable system for exchanging important messages.

As per Claim 66, *Wagner* does not disclose that the indication that the network acknowledges the acknowledgment from the second workstation signifies the completion of a transaction relating to the bid or offer. As was pointed out under the analysis of Claim 43, *Benton et al.* teach a system for performing financial transactions between a host and remote terminals that involves sending an acknowledgment and then sending “an acknowledgment of the acknowledgment”. Once the “acknowledgment of the acknowledgment” has been received, the transaction is considered “complete”. Further, it was pointed out that even without the benefit of the teachings of *Benton et al.*, when a human intermediary handles

Art Unit: 2761

transactions between two parties, the obvious solution would be to simply ask both parties whether they have received the message. It would have been obvious to one of ordinary skill in the art to combine such ordinary business practices and/or the teachings of *Benton et al.* with the system of *Wagner*. The motivation would have been to provide a reliable system for exchanging important messages.

References Cited

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Silverman et al. (US 5,136,501) disclose a matching system for trading instruments in which bids are automatically matched against offers for given trading instruments for automatically providing matching transactions in order to complete trades.

Johnson et al. (US 4,987,538) disclose a method for automated processing of provider billings.

Suzuki (US 4,847,762) disclose a data input device for establishing a data format and processing entered data in accordance with an established format.

Sibley, Jr. (US 4,677,552) disclose a method for facilitating international commodities trading.

Pritchard (US 4,491,725) discloses a medical claim verification and processing system with a network of terminals communicating to a central brokerage computer.

Art Unit: 2761

Tanaka (EP 0416482A2) disclose a method and system for automatically trading of items such as stocks with improved security.

Conclusion


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Morgan whose telephone number is (703) 306-2906. The examiner can normally be reached on Monday to Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Voeltz, can be reached on (703) 305-9714. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-0040.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

March 26, 1999

S.M.


EMANUEL TODD VOELTZ
SUPERVISORY PATENT EXAMINER
GROUP 2700